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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/771,186	01/29/2001	Lawrence Bernard Kool	RD-28,011	7166
23413	7590	03/29/2004	EXAMINER	
CANTOR COLBURN, LLP 55 GRIFFIN ROAD SOUTH BLOOMFIELD, CT 06002			MARKOFF, ALEXANDER	
			ART UNIT	PAPER NUMBER
			1746	

DATE MAILED: 03/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/771,186

**Applicant(s)**

KOOL ET AL.

**Examiner**

Alexander Markoff

**Art Unit**

1746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 February 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-28 and 30-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 24-28 and 30-33 is/are allowed.
- 6) ☒ Claim(s) 1-8, 17-21, 23 and 34 is/are rejected.
- 7) ☒ Claim(s) 9-16 and 22 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 January 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/08/03 has been entered.

### ***Claim Objections***

2. Claims 9-16 and 22 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The applicants amended the claims to language "consisting essentially of". This language excludes additional components. Thus, the claims are improper. These claims are not further treated on the merits.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 1-8, 17-23 and 34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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The claims are indefinite because it is not clear how can an aqueous composition consists essentially of acid or precursor to the acid. It appears that the aqueous composition must comprise water. This is especially not clear in view of claim 6, which requires the aqueous composition being  $\text{H}_2\text{SiF}_6$ .

Claims 7 and 8 are indefinite because they preparation of  $\text{H}_2\text{SiF}_6$  in situ within the composition from reagents, such as HF. This appears to contradict to the language "consisting essentially of". It is noted that the applicants themselves argue that the language "consisting essentially of" excludes HF (Remarks, page 9, first paragraph).

It is not clear what is referenced as a "precursor" and what the language "consisting essentially of" excludes.

Claim 5 and 7 is indefinite because it is not clear how can an acid be form by dissociation of a salt. Dissociation of a salt would give a dissociated salt.

Clarification is requested.

### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the

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applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-4, 6-8, 17-19 and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by O'Brien et al.

This rejection made by examiner Carrillo in the previous Office action is maintained for the reasons of the record in view of the fact that the meaning of the a "precursor" and "consisting essentially of" is not clearly defined.

7. Claims 1, 2, 5, 6, 17, 23 and 34 are rejected under 35 U.S.C. 102(e) as being anticipated by Kiya et al (US Patent No 6,274,027).

Kiya et al teaches a method as claimed. See entire document, especially column 11, lines 4-21.

### ***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

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not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

11. Claims 3, 4 and 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kiya et al in view of Dolan (US Patent 5,769,967) and Becker et al (US Patent NO 3, 956,147).

Kiya et al teach a method as claimed except for the specific result effective variable conditions such as concentration of active ingredient, temperature and the reaction time.

While, not specifying the specific pickling parameters for  $H_2SiF_6$  solutions Kiya et al teach specific parameters for the other disclosed solutions. See Examples. The disclosed parameters are in the claimed ranges.

Thereby it would have been obvious to an ordinary artisan at the time the invention was made to conduct pickling with  $H_2SiF_6$  solution at the parameters in the ranges disclosed for other pickling solutions and further to find optimum ranges for the result effective variables inside the disclosed ranges by routine experimentation.

On the other hand, Dolan and Becker et al shows that the claimed ranges for concentration, temperature and reaction time were conventional for reaction between  $\text{H}_2\text{SiF}_6$  and metal oxides. It would have been obvious to an ordinary artisan at the time the invention was made to conduct a pickling method of Kiya et al at the conventional parameters disclosed by the prior art for the reaction between  $\text{H}_2\text{SiF}_6$  and metal oxides with reasonable expectation of adequate results.

***Allowable Subject Matter***

12. Claims 24-27, 28 and 30-33 are allowed.
13. The following is a statement of reasons for the indication of allowable subject matter: The claims were indicated allowable by examiner Carrillo in the previous Office action. Newly discovered prior art does not change the reasons provided by the previous examiner.

***Response to Arguments***


14. Applicant's arguments filed 12/08/03 have been fully considered but they are not persuasive. The arguments directed to the rejection made over O'Brien et al are not persuasive because of the reasons given above in the rejection made under 35 USC 112(2). The rejection is maintained.
15. Applicant's arguments with respect to other previously made rejections of the claim have been considered but are moot in view of the new ground(s) of rejection.

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander Markoff whose telephone number is 571-272-1304. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy P Gulakowski can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Alexander Markoff  
Primary Examiner  
Art Unit 1746

AM

ALEXANDER MARKOFF  
PRIMARY EXAMINER